

AMENDMENTS TO THE CLAIMS

1-2 (Canceled)

3. (Previously Presented) A telecommunications toll switch system connecting callers with called service sponsors, the telecommunications toll switch system comprising:

toll switches forming a network;

a shared database computer connected to a toll switch of the toll switches, the shared database computer having a database storing routing plans defining routes connecting the callers to a called service sponsor of the called service sponsors;

the shared database computer being programmed to return instructions to the toll switch in response to a query from the toll switch, the query being generated by the toll switch in response to a call from a caller of the callers to the called service sponsor, the query indicating initial route information followed by the call before reaching the toll switch, the instructions indicating a specific route for the call to be implemented by the toll switch in response to the instructions, the initial route information providing an indication of a route followed by the call from the caller to the toll switch, and a routing plan of the routing plans defining alternative routes from which the specific route is selected by the shared database computer in response to the routing plan and the initial route information; and

an announcement system connected to the toll switch, the announcement system having a recording indicating that a specified rate is to be applied to the call,

the routing plan being such that the specific route is a first route when the initial route information includes an indication that the call was operator-assisted, and

the first route being such that the announcement system is controlled to play the recording when the specific route is the first route.

4. (Previously Presented) The system of claim 3, wherein the routing plan is such that the specific route is a second route when the initial route information includes an indication that the call originated from a cellular phone.

5. (Previously Presented) The system of claim 3, wherein the routing plan is such that the specific route is a third route when the initial route information lacks an identification of the caller.

6. (Previously Presented) The system of claim 5, further comprising a support system computer connected to the shared database computer and programmed to update the routing plans in response to input data directly entered by the called service sponsors.

7. (Previously Presented) A telecommunications toll switch system connecting callers with called service sponsors, the telecommunications toll switch system comprising:

toll switches forming a network;

a shared database computer connected to a toll switch of the toll switches, the shared database computer having a database storing routing plans defining routes connecting the callers to a called service sponsor of the called service sponsors;

the shared database computer being programmed to return instructions to the toll switch in response to a query from the toll switch, the query being generated by the toll switch in response to a call from a caller of the callers to the called service sponsor, the query indicating initial route information followed by the call before reaching the toll switch, the instructions indicating a specific route for the call to be implemented by the toll switch in response to the instructions, the initial route information providing an indication of a route followed by the call from the caller to the toll switch, and a routing plan of the routing plans defining alternative routes from which the specific route is selected by the shared database computer in response to the routing plan and the initial route information; and

an announcement system connected to the toll switch, the announcement system having a recording indicating that a specified rate is to be applied to the call;

the routing plan is such that the specific route is a third route when the initial route information lacks an identification of the caller; and

the third route is such that the announcement system is controlled to play the recording when the specific route is the third route.

8. (Previously Presented) The system of claim 3, wherein:

the routing plan is such that the specific route is a third route when the initial route information lacks an identification of the caller; and

the third route includes an operator for obtaining credit information from the caller.

9. (Previously Presented) The system of claim 3, wherein the routing plan is such that the specific route is a fourth route when the initial route information includes an indication that the call originated from one of a specified local exchange carrier and a specified area code.

10. (Previously Presented) The system of claim 9, further comprising a support system computer connected to the shared database computer and programmed to update the routing plans in response to input data directly entered by the called service sponsors.

11. (Previously Presented) The system of claim 3, further comprising a support system computer connected to the shared database computer and programmed to update the routing plans in response to input data directly entered by the called service sponsors.

12-13 (Canceled)

14. (Previously Presented) A telecommunications toll switch system connecting callers with called service sponsors, the telecommunications toll switch system comprising:

a network having toll switches;

a database computer connected to an originating toll switch of the toll switches;

and

the database computer having a database storing routing plans defining alternative routes that connect the callers to a termination of a called service sponsor of the called service sponsors;

each of the alternative routes being determined based on a parameter supplied in a query receivable by the database computer from the originating toll switch;

the originating toll switch being programmed to generate the query responsively to a call received by the originating toll switch from a caller of the callers to the called service sponsor;

the originating toll switch being programmed to implement a specific route determined based on the parameter after receiving data from the database computer responsive to a routing plan of the routing plans and the query;

the parameter being one of data identifying a calling party number used by the caller to place the call, data indicating that the call arrived at the originating toll switch through a human operator, and data indicating that the call originated from a cellular telephone; and

an announcement system connected to a toll switch of the toll switches, the announcement system having a recording indicating that a specified rate is to be applied to the call,

the parameter is data indicating whether the call arrived at the originating toll switch through a human operator and the routing plan being defined such that the specific route is a first route when the parameter indicates the call arrived through a human operator, and

the first route being such that the announcement system is controlled to play the recording when the specific route is the first route.

15. (Previously Presented) The system of claim 14, wherein the parameter is data indicating that the call originated from a cellular telephone.

16. (Previously Presented) The system of claim 14, wherein the parameter is data identifying a calling party number used by the caller to place the call.

17. (Previously Presented) The system of claim 14, further comprising:

a support system computer connected to the database computer and programmed to update the routing plans in response to input data directly entered by the called service sponsors;

the support system computer being programmed to represent the routing plans as a graphical object with each of the alternative routes corresponding to a branch-shaped portion of the graphical object.

18. (Previously Presented) A telecommunications toll switch system connecting callers with called service sponsors, the telecommunications toll switch system comprising:

a network having toll switches;

a database computer connected to an originating toll switch of the toll switches;

and

the database computer having a database storing routing plans defining alternative routes that connect the callers to a termination of a called service sponsor of the called service sponsors;

each of the alternative routes being determined based on a parameter supplied in a query receivable by the database computer from the originating toll switch;

the originating toll switch being programmed to generate the query responsively to a call received by the originating toll switch from a caller of the callers to the called service sponsor;

the originating toll switch being programmed to implement a specific route determined based on the parameter after receiving data from the database computer responsive to a routing plan of the routing plans and the query;

the parameter being one of data identifying a calling party number used by the caller to place the call, data indicating that the call arrived at the originating toll switch through a human operator, and data indicating that the call originated from a cellular telephone; and

an announcement system connected to a toll switch of the toll switches, the announcement system having a recording indicating that a specified rate is to be applied to the call,

the parameter being data incompletely identifying a calling party number used by said caller to place the call,

the routing plan being defined such that the specific route is a third route when the data incompletely identifies the calling party number, and

the routing plan being defined such when the specific route is the third route, the announcement system is controlled to play the recording when the specific route is the third route.

19. (Previously Presented) The system of claim 14, wherein:

the parameter is data incompletely identifying a calling party number used by the caller to place the call;

the routing plan being defined such that the specific route is a third route when the data incompletely identifies the calling party number; and

the third route directs the call to a human operator.

20. (Canceled)

21. (Previously Presented) A method for permitting control of call routing and billing by sponsors of pay-for-call services in a toll network system having toll switches, a central database computer connected to the toll switches having a routing plan stored therein, the method comprising:

modifying the routing plan by insertion or deletion of an element that causes a call to be routed to a first termination when an automatic number identification record detected by an originating toll switch of the toll switches is incomplete;

transmitting automatic number identification data relating to the call from the originating toll switch to the central database computer;

determining specific instructions for routing the call from the routing plan modified and transmitting the specific instructions to the originating toll switch; and

receiving at the originating toll switch specific instructions and routing the call from the originating toll switch to the first termination when the automatic number identification record detected by the originating toll switch is incomplete.

22. (Currently Amended) A method for permitting control of call routing and billing by sponsors of pay-for-call services in a toll network system having toll switches, a central database computer connected to the toll switches having a routing plan stored therein, the method comprising:

modifying the routing plan by insertion or deletion of an element that causes a call to be routed to a first termination if an Operator Services Position System (OSPS) record, indicating that the call originated through an operator, detected by an originating toll switch of the toll switches is incomplete;

transmitting the OSPS record relating to the call from the originating toll switch to the central database computer;

determining specific instructions for routing the call from the routing plan modified and transmitting the specific instructions to the originating toll switch; and

receiving at the originating toll switch the specific instructions and routing the call from the originating toll switch to the first termination when the OSPS record detected by the originating toll switch indicates the call originated through an operator.

23. (Previously Presented) A telecommunications toll switch system connecting callers with called service sponsors, the telecommunications toll switch system comprising:

toll switches forming a network; and

a shared database computer connected to a toll switch of the toll switches, the shared database computer having a database storing routing plans corresponding to the called service sponsors, the routing plans defining a specific route to be implemented by an originating toll switch of the toll switches when a call is received by the originating toll switch, the specific route being one of two alternative routes, the two alternative routes possibly ending at the same destination,

the two alternative routes being modifiable by a support system computer connected to the shared database computer through a program running thereon and addressable through at least one of telephone prompting, communication through direct modem connection via a termination, and connection through the Internet,

the two alternative routes being defined by a conditional branch point, called a test node, from which stem two alternate branches, each of the two alternate branches corresponding to one of the two alternative routes, the specific route corresponding to the one of the two alternate branches that is connected to an outcome of the test node that satisfies a condition of the test node, and

the condition of the test node being determined by a feature of data corresponding to an origin of the call, the data being communicated to the database computer through a query from the originating toll switch to the shared database computer.

24. (Previously Presented) A telecommunications toll switch system connecting callers with called service sponsors, the telecommunications toll switch system comprising:

toll switches forming a network;

a shared database computer connected to a toll switch of the toll switches, the shared database computer having a database storing routing plans corresponding to a called service sponsor of the called service sponsors; and

a billing recorder connected to the toll switch, the billing recorder recording a duration of a call and a rate to be applied to the call on a billing record,

the routing plans defining a specific route to be implemented by an originating toll switch of the toll switches when a call is received by the originating toll switch, the specific route being one of two alternative routes, the two alternative routes possibly ending at the same destination,

the two alternative routes being modifiable by a support system computer connected to the shared database computer through a program running thereon and addressable through at least one of telephone prompting, communication through direct modem connection via a termination, and connection through the Internet,

the two alternative routes being defined by a conditional branch point, called a test node, from which stem two alternate branches, each of the two alternate branches corresponding to one of the two alternative routes, the specific route corresponding to the one of the two alternate branches that is connected to an outcome of the test node that satisfies a condition of the test node,

at least one of the two alternate branches having an object, called a rate node, that forces the rate to be applied to the call to be overridden when the one of the two alternate branches is connected to the outcome, whereby the billing recorder records an override rate on the billing record when the condition is satisfied, and

the branch point being the test node in which the condition is determined by a parameter indicating an origin of the call from a caller of the callers, the parameter being communicated to the shared database computer through a query from the originating toll switch to the shared database computer.

25. (Previously Presented) The system of claim 24, wherein the parameter indicates whether the call originated through operator-assistance.

26. (Previously Presented) The system of claim 24, further comprising:

an announcement system connected to the toll switch, the announcement system having a recording indicating that the rate is to be applied to the call;

a routing plan of the routing plans being such that the one of the two alternative branches defines a first route when the parameter indicates that the call was operator-assisted; and

the first route being defined such that the announcement system is controlled to play the recording when the specific route is the first route.

27. (Previously Presented) The system of claim 24, wherein the parameter indicates whether the call originated from a cellular phone.

28. (Previously Presented) The system of claim 24, wherein the parameter is an indication of a lack of a caller automatic number identification which identifies a local exchange company of the caller.

29. (Previously Presented) The system of claim 28, further comprising:

an announcement system connected to the toll switch, the announcement system having a recording indicating that the rate is to be applied to the call;

the routing plan being such that the one of the two alternative branches defines a third route when the parameter indicates that the caller automatic number identification is lacking; and

the third route being defined such that the announcement system is controlled to play the recording when the specific route is the third route.

30. (Previously Presented) The system of claim 28, wherein:

the routing plan is such that the specific route is a third route when the parameter indicates the caller automatic number identification is lacking; and

the third route routes the call through an operator to obtain credit information from the caller.

31. (Previously Presented) The system of claim 24, wherein the parameter is an indication that the call originated from one of a specified local exchange carrier and a specified area code.

32-37 (Canceled)

38. (Previously Presented) The method of claim 41, wherein the call-origin-data includes data indicating that the call originated through an operator.

39. (Previously Presented) The method of claim 41, wherein the call-origin-data includes data indicating that the call originated from a cellular phone.

40. (Canceled)

41. (Previously Presented) A method for controlling a plurality of telecommunications switches, the method comprising:

receiving, at a database computer connected to a telecommunications switch of the plurality of telecommunications switches, call-origin-data defining an origination route of a call to the telecommunications switch;

determining, at the database computer, a selected route responsively to a condition and the call-origin-data; and

transmitting in response thereto the selected route back to the telecommunications switch, wherein transmitting the selected route is responsive to a database of the database computer defining routes through which the call may be routed to a final termination, the selected route being one of the routes, the selected route being selected from among the routes responsively to the condition satisfiable by the call-origin-data,

the call-origin-data includes data indicating that automatic number identification is not provided by a local exchange company from which the call originated, and

the selected route includes an indication that an announcement is to be played by the toll switch when the data indicates that the automatic number identification is not provided, the indication indicating that a surcharge is to be applied to the call.

42. (Previously Presented) The method of claim 41, wherein:

the selected route includes one of a human operator platform and a digit-prompter to obtain information from a caller making the call when the data indicates that the automatic number identification is not provided.

43-45 (Canceled)

46. (Previously Presented) The method of claim 48, further comprising controlling a billing record to record data responsive to the rate data.

47. (Previously Presented) The method of claim 46, further comprising reading the billing record and generating data defining rates for billing for the call.

48. (Previously Presented) A method for controlling a computer for controlling a plurality of telecommunications switches, the method comprising:

storing, on the computer, routes through which a call may be routed to a final termination, a selected route being one of the routes, the selected route being selected from among the routes responsively to a condition satisfiable by call-origin-data defining a route of the call to an originating switch of the plurality of telecommunications switches;

receiving at the computer the call-origin-data;

determining the selected route responsively to the condition and the call-origin-data, wherein determining the selected route is effective to determine an override rate applicable to the call;

transmitting the selected route to a telecommunications switch; and

controlling an announcement system connected to the telecommunications switch to invoke an announcement indicating a surcharge to be applied to the call responsively to instructions and rate data.

49. (Previously Presented) The system of claim 3, wherein:

the routing plan is such that the specific route is a third route when the initial route information lacks an identification of the caller; and

the third route is such that the announcement system is controlled to play the recording when the specific route is the third route.

50. (Previously Presented) The system of claim 14, wherein the parameter is data incompletely identifying a calling party number used by the caller to place the call.

51. (Previously Presented) The system of claim 14, wherein:

the parameter is data incompletely identifying the calling party number used by the caller to place the call;

the routing plan being defined such that the specific route is a third route when the data incompletely identifies the calling party number; and

the routing plan being defined such when the specific route is the third route, the announcement system is controlled to play the recording when the specific route is the third route.